

Field Trip No. 12.

South Coast & Tablelands of N.S.W. 9-22/12/44.

Species listed in red ink were collected.

8. 10 km

9/12/44. Camberra Rly. Sta. 54084.3 mls. 18440 ft. 27.70 ms. wxc.

Quercus laevis 90. 93. 27.13, 2380. J.S.F. Cordieri, macror., Rossii, A. G. ...

*A. frater*

*A. Guiciardi, A. frater,*

polyanth., macul. Macrotoma sp., nymph. 94. Creek rubida.

*A. vulgaris*, *Brachyscama lobifrons*

Phacel, Praxidubus

pusilla, Ochotona, Phael. 9.30 am. 27.15.98. panatlon

*A. ulgaris*, *A. pusilla*, *Brachy*, *terala*, *thaul*.

<sup>duplex</sup>  
along creek 101 rd. junction, Hoskingtown - Captrams flat.  
Waltham, *Praxibulus laevis* *laeviusculus* (P.) *Praxibulus duplex*

Trellis flood plain (broad). 106 Ditto. 107. Punc. - rub. Bradysia <sup>duplex</sup>

Phenol. Res. 109 Phenol 113 ~~Phenol~~ *Coniaca* sp. *Brachylabus* *flavimatus* 11.5.94 26.93

*A. melanos*, *Prasidius* <sup>duplex</sup> *Cryptobolus*, *hapophorus*

(2570?) 114. ~~Stuartian a - reburda~~ <sup>Lumacaetes lumacaetes</sup> Brachyura, frater, Oedalus,  
lumacaetes.

*G. australasica*

*pusilla*, Phaul. 117. Tall. *Stenotaphrum rubra*, 119 Captain

*P. brunnea*, ~~Para~~, *Ciphula*, *G. australasiae*, *Prasocarpus*, *insolens*  
26 31" *P. hirta* *densa* *Fell* *densa* *densa*

Hat. 26.75". 122. 26.21. Rubeda-dense. Tall, dense, *Davsonia*  
*bracteata* (R) *bracteata* (R)

~~Cinnamomum~~ *Prasophloeum* (K)  
-alt. 17. DEED Poe. 123. 26. 08" *Prasophloeum* *laminatum* *laminatum* (K)  
*rubida* - *pinnatifida* - *pauciflora*

*Brachycarna*, *Cryptobothris*, *Kozacius kolacognatus* (R)

in hollow: spp. collected very numerous on cleared ground

Phaul., *Goniaca* sp.

rare in virgin forest. Phaul. merdani 125 (after fork)

*Moraba* *Edwardsi*, *P. brunnea*, [fast. - brown] *Cipitula pyrrhocera* "C. pyrrhocera", *C. pyrrhocera* (R) 35.36 44.00

*Chrysanthemum* *fastigiatum* var. *pyramidalis* 25.16 4/10

135 (inf. to right) 25.475" at top. ~~here~~ here pure pauciflora.

Most of the specimens Crust. at top. 134 Valley of

*A. vulgaris*, *Brachyodonta*, *Phaulxeridium* *littorinum*

Shoal Haven at Bridewood - Capt. Hat - Kinnawee fort.

natural savannah? 27.225° 5.40 pm No observations

could be made between 135 & 134, nor between

13 4 4 Прошья.

10/12

10/12  
 Moruya 54195 196. Uast. Oed. Praxilulus galeatus scabra  
 203. Phaul. Uast. 206 Acrida. 29. 8 Ciphul. Gonia sp. Percassa Praxilulus  
 221. A. red Gunn. A. intermedia Caledia Caledia Phaul Acrida  
 Moruya Acrid. Phaul. Pran. 199. Rhizala 212. Praxilulus galeatus  
 11/12

11/2  
Thoreya - Bateman. Moruya 258. 261. *Maculata* Zimm, 1871.  
Caledonia, Exarna, *Aphila*, ~~Batema~~, *Goniaca*, *Chitza*, *Cryptobotanus*,  
*Prochilus* <sup>(R)</sup>, *Eusphallus*,  
on granite. 266. Mainly *batema*, no Zimm, plentiful Zimm  
*Goniaca*, *Pseudura musgravi* (R),  
*Angulata*,  
leaves *Banksia*. Gastr. Bateman's Bay. shallow appearance

swamp immediately behind beach, moist with  
*A. m. Garis.*  
 Cas. Gastropoda, Calidia, Phaul. *B.B. petularis* Forst.  
Phaul. *Goniada* sp.,

Summary of vegetation - Canberra to Bateman.

Apart from stellulata, there were apparently no new eucalypts until the top of the Divide was passed, when a peppermint(?) & ? <sup>fastigata</sup> ~~obliqua~~ immediately appeared, along with pauciflora. No observations were made east of the Divide after the peak at 125, except for 27 miles from Moruya to Trahuen. Except for a few miles from Moruya, where there is more of a mixture, the vegetation here is substantially the same all the way, consisting largely of <sup>eugenioides</sup> ~~obliqua~~ (?) & several other spp., including longifolia?. Saligna occasional in gullies, gummiifera occ. At ca. 26 mls from Moruya there is a flat some miles long, bearing ? <sup>umbellata</sup> ~~amplifolia~~ & A. intermedia. Moruya

to Bateman is almost entirely maculata-  
paniculata, with gummifera prominent in  
places. Round Moruya township & from there to the  
Seeds, <sup>umbellata</sup> ? amplifolia woodlands. (Note fruits of this  
red-gum are not very small.) Near Bateman  
there is a patch of almost pure pilularis.

12/12. 54286

Bateman to Braidwood To Mulligan, maculata is  
chief dominant, with obliqua. ~~longifolia~~ ? goniochaeta  
in gullies. [All the way from Araluen to here is almost  
entirely dense timber, with relatively insignificant  
clearings for dairying] Mulligan, 92. Phaul ? <sup>saligna</sup> Tristama.  
Acrida. 294 ? angophoroides Acrida. 294. Piperita

Calidia. ca. 295-303 ? Tristama chief dom. 303. On  
Creek flat, very large euc. bark rough at base, heavy  
ribboring, whitish above. 305 ? Siberiana 308 ? Strombos !  
with Siberiana, Siberiana the chief dom. from 305  
to top of Clyde Mt. at 311. 312 Clearing of some size  
<sup>Praxidulus ~~lanceolatus~~ lanceolatus (L) molens</sup> <sup>(terminalis?)</sup>  
Gum with basal few feet flaccid, rest white & grey  
Phaul. Gaster 306 Pana. flora also. 319 Panc. & still.

Continuous clearing along one line or another, from  
312 onwards. Braidwood 326.

Notes on Collections so far :- The sparse fauna of  
the forest communities, & particularly of the forest types

in which maculata is prominent, is noteworthy. The richest fauna of the forest types was in a community of gummifera with undergrowth approaching that of the sandstone association. Coastward limitation of the distrib. of some spp. may be partly due to the forest barrier having prevented the spp. concerned from reaching the coast. Individuals were quite numerous immediately to the west of Clyde Mt. at 312, where rainfall was probably very high, but practically nothing was found in the clearings towards Nelligan. The sharp change in the veg. immediately on crossing the coastal range was again noted, although diff. spp. were involved from those on the Dividing Range. Apparently natural savannah is present in the Brindwood district.

13/12  
Brindwood (54327) to Nowra. 8.50 am 27.7". 328. *A. pusilla*, *Viminalis*  
*A. vulgaris*, *Brachy.* <sup>*duplex*</sup> *Brachy.*, *A. pusilla*, *A. vulgaris*  
*pauciflora* woodland. Phaul. 331. *Pauc.* Phaul. 332. *Vim.*  
*A. pusilla*, Phaul, *A. vulgaris* *Brachy.* <sup>*duplex*</sup> *Brachy.*, *Conia* sp., *Didalvus*, *A. frater*,  
*Brachy.* <sup>*duplex*</sup> *Brachy.* 335. *Vim.*, *Seberana*, *strongys* + a new  
*M. australis*, *Pracitulus* <sup>*laminatus*</sup> *laminatus* (H) *duplex*  
one (spec.) with horn back almost to tips. Phaul. + *vulg.*

*Brachy.* (v. rare) *Prax.* va. *y. australis* (?) Obviously  
*Prax.* prefers a bit of timber, while *Brachy.* likes savannah.



*A. vulgaris*, *M. australis*, *Goniaca*, *A. frater*.

54338. Junction of *meliodora* (?) with *maculosa* or *nsc*.

Typical pasture of *Poa* & *Aristida*. *Oedolus* (va.) *pusilla*,

*Phaul.* *brachy* (rare) 27.88" 11.20 am 339. Very broadly spreading  
suc., about lower half with brown platy bark,

upper half brownish. with pauciflora, *arubida* & stellulata

*Peakesia*, *A. frater*, *M. australis*, *Cipphula*, cleared & partly so,  
340 DSF of *maculosa*, *Rossii* & *diversa* open the low shrubs.

*Exarna*, *Pracibulus laminatus laminatus* (R), *insolens*  
*Xanth.* & grasses. *Old. vulg.* (V. nsc). 27.94 12 noon. 344 *Scirpus*  
*Rossii*, *A. pusilla*, *Phaul.*, *A. vulgaris*, *Brachysama*, *Pracibulus* ~~*laminatus*~~ *laminatus* (R)  
*Poa* swamp & adjacent paddock. *Gast.* (n). *Acrida* (n). *Oedolus*

348 suc. very like *haemastoma* (spec.) as. with *rubida*

*A. pusilla*, *A. vulgaris*, ~~*Peakesia*~~, *Brachysama*,  
*maculosa* *pauc.* 349. *Vernonia* *alonge* *spec.* *Oedolus*  
*Pracibulus laminatus laminatus* (R). ~~*Peakesia*~~, *Brachysa*, *A. vulgaris*, *Pracibulus laminatus*  
*Phaul.* *Gast.* (n). 353. *Pauc. pus. vulg.* *Old. Phaul.* *Prax.*

*laminatus* (R), *insolens*, *Cipphula*, *G. australasica*, *Exarna*, *A. frater*, *Monistria concinna* (R)  
*Gast.* (n). 354 Partly cleared him, *pauc.*, *maculosa*. *Old.*

*vulg.* *Macroth.* Small shrubs of *Leptospermum* & *Banksia*,  
*A. pusilla*, *A. vulgaris*, *Pracibulus*

*Aristida*. ~~*Dr*~~ 360 *herriga*. 363. *Rub.*, *meliod* (spec), *Shuart*.  
*laminatus laminatus* (R) *insolens*

*Phaul.* *Immed.* after 363 we commence to climb the  
(sandstone) halfway up

*Ridgway House Range*. 365. *Sieberana* & ? *Muelleriana* (spec.)  
*Conyphates*, *Goniaca* sp.

plus a species with very dark, not very rough bark in  
basal half. very long branches, whitish apically.

4 pm 27.46"  
Thin pendulous leaves. *Phaul.* *Crypt.* 365. Top of range  
*Goniaca*, *A. vulgaris*, *Moraba*, *Cipphula*, *Exarna*, *Peakesia*, *Monistria*, *Conyphates*, *A. frater*,  
*amanti* (R), *brunnea*, *concinna* (R)

Small *Sieberana* & the straggly with very flat fruits. Also

*unisa*  
*sp.*  
*rub.* Typical sandstone undergrowth and with it the  
*A. vulgaris*, *Peakesia*, *M. australis*

typical rich *Acridis* fauna. 367 *Merantha* prominent.

(Sarrafra) ~~Pras~~, *A. vulgaris*, *Prasichulus laminatus laminatus* (R)  
54371. Change of soil, return to Vivian. No more collecting

This was only a flash in the pan. Virtually all  
sandstone until 393, although deep, with very  
tall trees, including *Eucalyptus*, between 35 & 90,  
393. Macula to *Pras*. From here to Nowra there are  
alternations & intergrades of maculata-*Pras*. &  
tall sandstone forest. No *Zamia*.

14/12.  
Nowra (413) to Coolangubla & Berry. - 419. Dairym Pasture of  
*A. vulgaris*.

*Myrtus*, etc., *Prasichulus* roadside road, Phaul. *Acrid* (n).  
*Stichogobolus*, *A. pusilla*, *A. vulgaris*, *Phaul*, *crinum vittatum*

420. Slope leading down from closely grazed maculata  
pasture to a shallow swamp. At various levels:

*Attractonophora* <sup>sp.</sup> (*nymphus*) *Caledia*, *Gastr.*, *Acrida* 430 Berry,  
~~*Prasichulus*~~, *Calediacaptiva*, *Prasichulus laminatus* (R)  
Berry to Kangaroo V. 434. Top of scarp. *Euc.*, *Prasichulus*, *Caledia*, *Phaul*.  
*Tristania*. Roadside. *Grass*. 435. *Prasichulus laminatus* (R)  
forest 28-525" 3pm. 437. *Tristania*. *Gastr.* 439 Top of down  
slope into valley. Very steep cleared slopes with *Phasipalium*

*Sonchaeae* *anabralascae*, quite an amount bare space. *Gastr.* a,

*Acrida* (no. 1 adult) *Caledia*, no *A. vulgaris*. 442. K.V.  
*A. pusilla*, *A. vulgaris*. *Rhizala*

444. *Phaul*: *Acrida* 451. *Piperita-Schizandra*, tall  
dense, level, consid. undergrowth of saplings &  
*laminatus galenitus* (R)

*Alacias*, 465 Moss Vale. 27.9" 5.30 pm. 448. *Prasichulus* sp.  
(466)

Moss Vale to Berrima. - 467. Fairly dense cleared pasture

Notes on colour of *Nonistria* caught at Pidgeon House Large.  
 Male & ♀ practically identical. <sup>Mid</sup> Dorsum dark except  
 for small yellow spot just anterior to third transverse  
 pronotal sulcus of ♀. Very prominent yellow shoulder stripes  
 from ant. to eye to 3rd pronotal sulcus; from there to  
 hind margin of pronotum broader & less distinct. Abdomen  
 with prominent yellow longitudinal stripes connected with  
 transverse lateral stripes along post. margin of each  
 segment. Prominent lateral yellow stripe from lateral facial  
 carina ant. to eye on to mesonotum. Dark part of lateral  
 pronotal lobes with 2 small spots in ♀, none in ♂.  
 Supra-anal plate entirely yellow. Hind femur  
 with a broad yellow longitudinal stripe along lower margin  
 of extemo-medial area. Narrow stripes along dorsal  
 & inferoventral median carinae ~~sub-meso-ventral~~ carina.  
 Rest of femur blue-black. Hind tibia entirely blue-  
 black below, entirely pale yellow above, except  
 for subbasal dark ring. [27.92" 5.18 pm.]

Brachy, *Brachy*, *A. vulgaris*, *A. frater*, *A. vulgaris*,  
*Brachy*, *Phaul*, *Gastr*, *A. vulg.* o. a 54470. Det. Peppermint,  
 ? maculosa, main dominant from V. to Berrina have  
 been peppermint, "spread" & pauciflora. 472 Berrina  
 Berrina to Boudal. - 473. <sup>*Cryptobothrus*</sup> *A. vulg.* [this sp. has been extremely  
 common, esp. for the dominant, since M.V.] with oblique,  
 peppermint, Sieber, very thin-leaved ribbon previously notes.

*Brachyscarpa*, *A. vulgaris*, *A. pusilla*, *Phaul.*, *Praxiphus* <sup>*insolens*</sup> ~~*laminatus*~~  
 544 76. Top of rise above Bowral. Pasture a little thin  
<sup>*laminatus* (R)</sup>  
 in places, dark red-brown soil. *Phaul.*, *Prax.*, *vulg.*, &  
*Brachy.* all v.d. *pus.* rare. *Gastr.* (n) rare. 477. Bowral,  
*A. pusilla*, *Brachyscarpa lobipennis*  
 Bowral to Robertson - 481. Top of rise. Clear from  
 peppermint & other trees. *Phaul.* *Prax.* *vulg.* 484 *Phaul.*  
*Crypt.* *vulg.* *Prax.* 487 fastigiate. *Phaul.* va. *vulg.* f. R. 93 Robertson  
<sup>*A. vulgaris*</sup>  
 95 *Phaul.* red bark 499. Beg. of descent of Macquarie  
 Pass. Very tall trees, light, very dark bark on lower  
 half, very long streamers, top buff smooth. Leaves  
 narrow, thin. 500. Same sp. & fast to *Acrida* 501 swamp  
*Attractantophila* (n), *Prax.* 504. Bottom of pass. Clear from  
 mainly red gum. *Phaul.*, *Acrida* (n) *Gastr.* (n) *vulg.*  
<sup>*A. pusilla*, *A. vulgaris*.</sup>  
 510 Albion Park. *Phaul.*, *Acrida* (n) *QED.* 516 Dapto. 518 Short  
 dense *Paspalum*. *vulg.* *Acrida* (n) *Gastr.* (n) 524 Wollongong  
 Wollongong: margin of swamp within few hundred  
 yards of beach: *Acrida* (n), *vulg.*, *Leucost.* (?).  
 57/12 (533)  
 Wollongong to Bulli, Appin & Picton. 537. *Syncaesia* 9 (mainly)  
<sup>*Gaustalasiace*</sup>  
 a tree with flakey bark basally, brown & grey smooth  
 above, larger thick, dark green leaves (Spec.). *Acrida* (n).  
 540 Bulli. 543 Bulli Pass. Tall tree, box bark to tips,  
<sup>*Monia* ~~*sp.*~~ *sonigera* <sup>*australasiace*</sup></sup>  
<sup>*ligata* (R)</sup>  
 long dark green serrate leaves. 545. Typical low  
*Eschara*, *Macrotona* ~~*australis*~~ <sup>*australis*</sup> *Khizala* *sonigera* *Moraba* *Rustroetes* *Ciphus*  
<sup>*sp.*</sup> <sup>*australis*</sup> <sup>*australis*</sup> <sup>*australis*</sup> <sup>*australis*</sup>  
 sandstone forest sheath. *Microtheca* *piperita*. *Ciphus*  
*Pedunc.*  
*musgravei* (R)



*Monistria* *Moraba* *Artica*  
sp. sp.

54545a. Sube. Mier. Heath- scrub. 548. *Xanthorrhoea* &  
*newgambii* (brachy. "Macrotona") *Ecarna*, *P. brunnea*.

heath-scrub swamp. 552. Scrub forest of *micrantha*.

(spic)  
gum. & cons. of *Acrophula*. 555. Appin. Typical sandstone  
forest from Bulli Pass to here. 556. Cleared from *tereticornis* *hemiphysalis*-  
*A. pusilla*, *A. vulgaris*, *Brachy*, *Acilopus*, *Oedaleus*.

(spic.) Rather short, dry, *Pasture*, but pretty dense. 557.

spic. *tereticornis*. 560. Diff. type of sandstone forest  
around Cataract River (from 558). *Moraba annuili* (R)  
No 562

Narrow-leaved *Angophora*.

Very small - fruited iron bark, ? red-gum with light dark

lower bark, & others. (spics.) 562. Wilton. 563 cleared from

hem. *teret.* & *par.* *Vulq.* (v.r.) 566. Scattered *tereticornis* saplings

*vulgaris*. *Pasture* extremely dry. 567. Badly sheet-eroded

*A. pusilla*, *A. vulgaris*, *Chotoicetes*,

hill-side, very dry. Some taller plants. Phaul. Chort!

567-69. Return to the form of sandstone forest noted under

560, in ass. with a ravine. 569. *M. australis* *Macrotona* frequent.

[*Macrotona* more closely related to *Ecarna* than to

*Macrotona*?] *Pickton* - 572

[Colour of *Monistria* ♀ from 545, recorded a few hours after  
death: General colour deep olive. Head with narrow yellow  
postocular stripes. Pronotum with no dorsal stripes,

but with one or two very small median yellow spots.

Abdomen above freely spotted with very small yellow spots,  
a row along mid-dorsal line & rows along each shoulder.

being larger than the rest. Broad lateral yellow stripe from in front of eye, along lower pronotal margin & on to mesopleuron. Sides abdomen with medium-sized yellow spots. Hind femur with broad yellow stripe along lower border of ecterus - median area, elsewhere with numerous very small yellow spots. Hind tibia deep olive with a few small yellow spots on dorsal surface near base, & spines pale yellow. (In life dorsal surface of hind tibia was bright blue). Supra-anal plate same as rest of abdominal dorsum. Abdomen beneath with two longitudinal rows of large yellow spots.]

18/12.

Pictou (54572) to Camden, Campbelltown & Sydney. - 576.

*A. pusilla*, *A. vulgaris*.

Overgrazed & somewhat eroded hill; Razorback Range. Pasture

very short, very dry. Chort, Yastr, Acrida (n) Phaul. 578 Ditto,

*A. pusilla* *A. vulgaris*

top of Razorback. Obs. Spec. of hemiphysa (previous record must have been something else). 581 Iron bark woodland with <sup>*Troglattia*</sup>

*Aristida*. Possibly 2 spp. narrow leaves (spec.) Obs. pas.

*calidia*, *A. vulgaris*,

uulg. Phaul. 585. Camden 589. Cleared from *hemiphysa*

& *A. intermedia* much *Themida*. Yastr. Acrida (n) pusilla, Obs.

*A. pusilla* *Choroicetes tenuifera*

591. Patchy veg. Cleared from *hemiphysa*. Obs. uulg. Acrida.

Chort. occ. to freq.

A. pusilla

54594. Campbelltown - 595. Short-eroded slope & better pasture

below. Chort. pus. ab. Salthush spec. 600. Thinning & clear, A. pusilla

hem.-teret. pus. Od. Chort. (+) Acrida(n). 605. Short dry

pasture. 606 Liverpool 610. Thinned hemiphloia. Calidia,  
Chotoicetes, Cryptobothrus

Od. ?pus. 613. Short grass, some bare ground, pus. A. pusilla tan

Acrida(n). 617. Grass, incl. Acrida, & low scrub.

Heterophemis(n). Completely built up from 618. 625

University.

Sydney to Richmond - University 644. Parramatta 658. Only

a few small fields not built on in this section. 662 Cleared

A. pusilla  
from tereticonis. Od. Chort. frogg. Acrida. 667. Cleared from  
maculosa, Oedalus, A. pusilla Acrida, Brachyga,  
teret. hemi-panic. Gast. Chort. loc. Acrida. 672 Gast.(n) Acrida  
A. pusilla.

(n) Od. ?Chort. Cleared from hem-teret. 675. Tall coppice of hemi-  
& Siderophloia (spec), numerous shrubs up to 5ft. No Acrididae.

677 Windsor 682 Richmond. Acrida(n). 689 Kerrang.

Kerrang to Pictou. - 692. Acrida(n) pusilla. Short dry pasture,  
Chotoicetes tenuifera

Acrida(n). 712 Perth. 716. Cleared from hem. Acrida(n).  
Calidia

720 A. intermedia along CK. Short grass. 724 Wallacia. Short

pasture. Acrida(n). 736 No Acridids. After this, no observations.

Pictou to Houlburn. - we leave the cleared hem-teret area at  
759 (unimproved after Tahmoor), center, DSF. 760. Misc. grass. "red gum"

Enana, maculosa. 762 Bass Cleared from hem-teret. Acrida(n)

Gast.(n)



54767. *Micr. guian.* - squat-fruited shrubby. Usual shrubby.

779. Mithazong 780 True red gum (spec) presumed <sup>insolens</sup> by same  
~~lanceolata (R)~~

Caledia 782 Bowral. 785. Peppermint & eucalypti (mainly the

790. Clear from pepper vines, <sup>good pasture.</sup> Phaul.

797. Large inc. (spec) bark rough & dark at base, white  
grey above, ribbons, from Encher to 798. Vulg. Prun.  
Betula pubescens

800. Bundarwan. 802 (from 801) Sandstone fossil typical

*A. pusilla*, *A. vulgaris*.

809 Ungello. 810. <sup>nativum</sup> *Piperita* <sup>amicum (R)</sup> *shungys*, also swamp. Enana  
*musgraei* (R), *Minyocoris* *nana*

Boumea, walg. Phaul, Prac, Old. Geogr. Rapida (2) 811 narrow

*Poa bussocks*. All collected spp. var. hastata. 813 Return to

DSF of a very mixed type, partly cleared. Maculosa,

*maculosa*, ? *Rosa*, ? *piperita*, ? *dineo* (sp. n.) shown in, including

a Banksia. Ole. fr. f., Exarna, 4. australis 820 Marlum



- A. pusilla*, *A. vulgaris*,  
54821. *Mellicodora* & big-juvenile *reignum* in woodlands. Short  
dry past. Oct. 823-7. Return to low Isf with *aniera*, other  
shrubby incl. *oce.* Sieber., & white gums (? *mac*, ? *rossii*).  
827. *A. vulgaris* Patch grasslands in hollows. Phaul. 828 Return to  
Isf, incl. *Rossii* & *macrothyrsa*. prob. *maculosa*. Enama  
833. Clones from mell-big juvenile. <sup>834</sup> / pas.